

BILL WILLIAMS RIVER BASIN**09426000 BILL WILLIAMS RIVER BELOW ALAMO DAM, AZ**

LOCATION.--Lat 34°13'51", long 113°36'29", in SE1/4SE1/4 sec. 4, T.10 N., R.13 W., La Paz County, Hydrologic Unit 15030204, on left bank 0.6 mi downstream from Alamo Dam, 3.7 mi downstream from Bullard Wash, and 8 mi downstream from confluence of Santa Maria and Big Sandy Rivers.

DRAINAGE AREA.--4,633 mi², of which 10 mi² probably is noncontributing.

PERIOD OF RECORD.--Oct. 1939 to current year. Monthly discharge only for Oct. and Nov. 1939, published in WSP 1313. Prior to Oct. 1943, published as "Williams River near Alamo." Oct. 1943 to Sept. 1967, published as "Bill Williams River near Alamo."

REVISED RECORDS.--WSP 1213: 1939(M). 1941(P). WDR AZ--89--1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 967 ft above sea level, from construction data. Prior to Apr. 9, 1968, at site 1.7 mi upstream at datum 1,002.95 ft above sea level.

REMARKS.--Records good. Diversions above station for irrigation of about 9,100 acres, mostly by pumping from ground water. Flow regulated by Alamo Lake, beginning Mar. 2, 1969. Temporary storage and slight regulation of releases through uncontrolled rectangular conduit through Alamo Dam June 23, 1968, to Mar. 27, 1969. Alamo Lake is formed by an earthfill and rockfill dam, completed in 1968. Total capacity of lake is 1,043,000 acre-ft. See table below for monthend contents.

EXTREMES FOR PERIOD OF RECORD.--1940--68: Maximum discharge, 65,100 ft³/s Aug. 29, 1951, gage height, 30.8 ft, site and datum then in use; minimum daily, 1.1 ft³/s Sept. 4, 1958.

1969--2002: Maximum discharge, 6,980 ft³/s Mar. 16, 22, 1993, gage height, unknown as weir had washed out; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--The history of floods that occurred prior to Oct. 1939 is published in WSP 1683. The peak discharges have been correlated with those for Bill Williams River at Planet. The peak discharge for Feb. 1937 has been determined as 105,000 ft³/s at a stage of 46 ft, site and datum then in use, from rating curve extended above 50,000 ft³/s on basis of slope-area measurement for flood of Sept. 6, 1939, at a stage of 39.6 ft, discharge of 86,000 ft³/s and known stable highwater control.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 35 ft³/s Feb. 14. Minimum daily discharge, 8.7 ft³/s on Jan. 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	9.6	11	9.8	9.6	28	25	22	26	26	26	24
2	26	9.6	11	9.6	9.6	28	25	22	26	26	26	24
3	26	9.6	11	9.6	19	27	25	22	26	24	26	24
4	26	9.6	11	9.6	27	27	25	22	26	24	26	24
5	26	9.6	11	9.6	28	26	25	22	26	24	26	24
6	26	9.6	11	9.6	29	26	24	22	26	24	26	24
7	26	9.6	11	9.6	30	26	23	22	26	24	26	24
8	26	9.6	11	9.6	15	25	23	22	26	24	26	24
9	26	9.6	11	9.6	17	25	23	22	26	24	26	24
10	26	9.6	11	9.6	32	25	23	22	26	24	26	24
11	26	9.6	11	9.6	33	25	23	22	26	24	26	24
12	26	9.6	11	9.6	33	25	23	22	26	24	26	24
13	26	9.6	11	9.6	34	25	23	22	26	24	26	24
14	26	9.6	11	9.6	35	26	23	25	26	24	26	24
15	26	9.6	11	9.6	34	26	17	27	26	24	26	24
16	26	9.6	11	9.6	34	26	22	28	26	24	26	24
17	26	9.6	11	9.6	34	26	22	28	26	24	26	24
18	26	9.6	11	9.6	33	21	22	28	26	24	22	24
19	26	9.0	11	9.6	27	26	22	27	26	24	26	24
20	26	9.6	11	9.6	31	26	21	26	26	24	26	24
21	26	9.6	11	9.6	30	26	21	24	26	24	26	24
22	15	9.6	11	9.6	29	26	22	24	26	24	26	24
23	9.6	9.6	11	8.7	28	26	21	24	26	24	26	24
24	9.6	9.6	11	9.6	28	25	22	24	26	24	26	24
25	9.6	9.6	11	9.6	28	26	22	24	26	24	26	24
26	9.6	9.6	11	9.6	28	26	22	24	26	24	26	24
27	9.6	9.7	11	9.6	28	26	22	24	26	24	25	24
28	9.6	9.8	11	9.6	29	26	22	24	26	24	24	24
29	9.2	10	11	9.6	---	26	22	24	26	24	24	24
30	9.6	11	11	9.6	---	25	22	24	26	24	24	24
31	9.6	---	11	9.6	---	25	---	25	---	26	24	---
TOTAL	647.0	289.5	341	296.9	772.2	798	677	740	780	750	793	720
MEAN	20.9	9.65	11.0	9.58	27.6	25.7	22.6	23.9	26.0	24.2	25.6	24.0
MAX	26	11	11	9.8	35	28	25	28	26	26	26	24
MIN	9.2	9.0	11	8.7	9.6	21	17	22	26	24	22	24
AC-FT	1280	574	676	589	1530	1580	1340	1470	1550	1490	1570	1430
(*)	72600	71600	71200	71100	70400	72100	70100	67600	64600	61800	59700	57300
(**)	-1600	-1000	-400	-100	-700	+1700	-2000	-2500	-3000	-2800	-2100	-2400

CAL YR 2002 TOTAL 9633.5 MEAN 26.4 MAX 40 MIN 9.0 AC-FT 19110 (**) -26200
WTR YR 2003 TOTAL 7604.6 MEAN 20.8 MAX 35 MIN 8.7 AC-FT 15080 (**) -16900

(*) Contents, in acre-feet, at end of month in Alamo Lake, furnished by Corps of Engineers.

(**) Change in contents, in acre-feet